

Claims

What is claimed is:

- 5 1. An isolated human Kunitz-type inhibitor
that inhibits blood coagulation in a mammal and wherein
DNA sequence encoding the human Kunitz-type inhibitor
hybridizes to nucleotides 138-305 of SEQ ID NO:1 under
highly stringent hybridization conditions.
- 10 2. The isolated human Kunitz-type inhibitor
of claim 1 wherein any differences between the human
Kunitz-type inhibitor and amino acid number 34 to amino
acid number 89 of SEQ ID NO:2 are due to conservative
15 amino acid substitutions.
3. A pharmaceutical composition comprising
the human Kunitz-type inhibitor of claim 1.
- 20 4. The pharmaceutical composition of claim 3
wherein the human Kunitz-type inhibitor is isolated from
E. coli.
5. A DNA construct comprising a first DNA
25 segment, wherein the first DNA segment is the DNA
sequence of claim 1, operably linked to additional DNA
segments required for the expression of the first DNA
segment.
- 30 6. A host cell comprising the DNA construct
of claim 5 wherein the host cell expresses the human
Kunitz-type inhibitor encoded by the first DNA segment.
7. The host cell of claim 6 wherein the host
35 cell is *E. coli*.

8. A method for producing human Kunitz-type inhibitor comprising:

culturing a cell according to claim 6; and

5 isolating the human Kunitz-type inhibitor produced by the cell.

9. The method of claim 8 wherein the cell is *E. coli*.

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10. An isolated DNA sequence that hybridizes to nucleotides 138-305 SEQ ID NO:1 under highly stringent hybridization conditions, wherein the isolated DNA sequence encodes a human Kunitz-type inhibitor that
15 inhibits blood coagulation in a mammal.

11. The isolated DNA sequence of claim 10 wherein any differences between the encoded human Kunitz-type inhibitor and amino acid number 34 to amino acid
20 number 89 of SEQ ID NO:2 are due to conservative amino acid substitutions.